

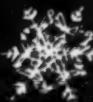
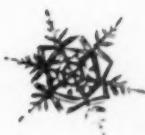
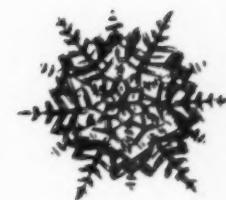


CORNELL EXTENSION BULLETIN 906



Cooking Frozen MEATS, POULTRY, GAME, and FISH

Faith Fenton



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THIS bulletin is designed to help you whether you buy meat, poultry, game, and fish already frozen or freeze them yourself. We have attempted to answer some of the questions homemakers most often ask about these frozen foods.

One frequent question is, "How long can I safely keep different meats in my freezer?" Meats, poultry, game, and fish keep well in frozen storage for reasonable periods of time, provided their initial quality is high, they are properly handled and wrapped before freezing, and they are frozen and stored at zero degrees F., or lower.

Poor wrapping of meat is a common fault. It causes dryness and poor flavor. Meats with a high percentage of fat are more likely to lose flavor than are leaner meats. The chief change in quality in frozen storage of meat is oxidation of fat—the chemical reaction of fat with oxygen in the air. It results in rancidity and off-flavors. Proper wrapping minimizes this danger.

Pork fat becomes rancid more quickly than fat of other meats. Turkey fat gets rancid sooner than chicken fat. Freezer storage of sliced smoked ham and bacon is not recommended. The flavor of sliced bacon may change after one week of storage.

Whole hams and slabs of bacon retain their quality for several months, however.

The lower the temperature, the longer the possible storage time. Do not allow the storage temperature to fluctuate much above zero degrees. A wide range of maximum storage times is given in table 1 but even wider ranges are sometimes given. A temperature of 5° F. shortens the maximum storage time 2 to 4 months. Maximum storage time depends on many factors, including first of all, the quality of the food when it is put in the freezer. Avoid keeping meat in the freezer for the maximum storage period. A wiser approach for you as a homemaker is, "How long do I *want* to keep meat in my freezer," not, "how long *can* I keep it?" Use your freezer as a checking account, not as a savings account. A rapid turnover of items will result in higher quality products and a more economical use of your freezer.

Storage times in table 1 are based on initial high quality products: beef should not be aged more than 6 to 8 days; pork, lamb, and veal should be chilled to at least 32°F. and held not more than 24 to 48 hours; poultry and game should not be held more than 24 hours, and fish should be frozen the day it was caught.

Table 1. Maximum Storage Times for Frozen Meats, Poultry, and Fish at 0° F.

<i>Meat, fresh</i>	<i>Months</i>		<i>Months</i>
Beef, steaks, roasts	9 to 12		
Beef, ground	4 to 6		
Lamb	9 to 12		
Pork	6 to 9		
Pork, sausage	1 to 3		
Beef or lamb liver	3 to 4		
Pork liver	1 to 2		
Heart	2 to 4		
Sweetbreads, brain	½ to 1		
Veal	4 to 6		
<i>Meat, smoked</i>			
Bacon, sliced	do not freeze		
Bacon, slab	1 to 3		
Ham, whole	1 to 3		
		<i>Poultry, fresh</i>	
		Chicken, ready to cook	6 to 7
		Giblets	2 to 3
		Turkey, ready to cook	6 to 7
		Turkey steaks	4 to 5
		<i>Poultry, cooked</i>	
		Chicken	2 to 3
		Turkey	1 to 2
		<i>Fish</i>	1 to 2

You get out of your freezer what you put into it. Texture and flavor are not improved by freezing. Less

tender meats are tenderized by freezing, but this makes little if any difference in cooking procedures.

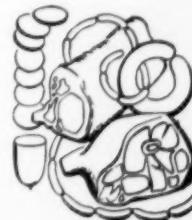
MEATS

Hard-frozen or Thawed?

"Shall I thaw my frozen meat before I cook it?" The choice is up to you. It depends partly on the thickness of the meat and your own management philosophy.

Meat has been much abused during thawing. It is often allowed to stand after it has thawed, resulting in excessive loss of drip and sometimes of other qualities. As a result, it is often recommended that steaks and chops be cooked from the hard-frozen state. Many, however, prefer to partly thaw large roasts. A more uniform degree of doneness results if large roasts are thawed before cooking. If some in your family like rare meat and some like well-done, you may want to cook smaller roasts from the frozen state.

If you have a locker and want a



roast from it for Sunday dinner, it may be easier for you to get it on Friday when you do other shopping. If you keep the roast in the storage compartment of your refrigerator, it will be thawed when you put it on to cook on Sunday. On the other hand, if you have a home-freezer and have unexpected guests, you may want to remove a roast from storage and cook it from the hard-frozen state. No difference in palatability, nutritive value, evaporation, or total drip has been found whether meat is thawed as a part of the cooking procedure, at room temperature, or in the refrigerator.

You must thaw small pieces which have been frozen together if you are

Table 2. Approximate Thawing Time for Frozen Meats

Thawing method*	Temperature	Kind of meat	Thickness of meat	Approximate thawing time
	<i>degrees F.</i>		<i>inches</i>	<i>hours</i>
Refrigerator	40° to 50°	Steaks	1	12
		Roasts Small Large		3 to 4 per pound 4 to 6 per pound
Room temperature	70° to 75°	Steaks	1	2 to 3
		Roasts Small Large Patties	1½	1 to 2 per pound 2 to 3 per pound 1½ to 2
Electric fan‡		Steaks	1	1 to 2
		Roasts Small		about 1 per pound

*Thawing meat in cold running water is not recommended because the meat tends to gain water even though it is wrapped.

†Diameter 2½ inches.

‡This method is not recommended for large roasts because the meat does not thaw uniformly, and there is excessive drip loss from the outer, thawed portions of the meat.

going to brown them. Meat to be coated with egg and crumbs, or batter, must be thawed before cooking. The coating will not stick to frozen meat. Ground meat which has not been completely seasoned before freezing must be thawed before seasoning.

If you thaw meat before cooking, thaw it in its original wrapping to prevent excess moisture loss by evaporation.

Hard-frozen meat cooked with moist heat thaws more quickly than that cooked by dry heat. It is impossible to give accurate thawing times. You can tell when a roast is sufficiently thawed by inserting a meat thermometer in the center of the roast when it has defrosted enough to permit doing so. Do not force the thermometer; it may break if the roast is still frozen in the center. It is easy to misjudge the cooking time of a partly

thawed roast. If enough time is not allowed, it is not done at mealtime.

Cooking

Hard-frozen steaks or chops should be placed farther from the heat source. They take almost twice as long to cook as do thawed or fresh cuts. Partly thawed roasts may take about 1/3 longer to cook than completely thawed roasts. The latter can be cooked for about the same time as the corresponding fresh cut. Hard-frozen roasts take from 1½ to 2 times as long to cook rare, and as much as 3 times as long to cook well-done as do corresponding fresh roasts. The larger the piece, the greater the difference in cooking times required for hard-frozen (0°F.) and fresh meat (45°F.). For example, a hard-frozen roast under 5 pounds takes about 15 to 20 minutes

longer a pound than the corresponding fresh roast; roasts over 5 pounds take about 25 to 30 minutes longer per pound.

Cook meat as soon as it is defrosted to prevent excessive juice loss and to retain high quality. Thawed boned meat, on standing, suffers more drip loss because of its larger cut surface than does thawed unboned meat.

In cooking times, as in thawing times, thickness of the meat is probably more important than weight. One-half-inch hard-frozen steaks require 3 to 4 minutes longer to cook than corresponding fresh steaks. One-inch frozen steaks take 9 to 10 minutes longer, and 2-inch frozen steaks take 16 to 18 minutes longer.

Roasts and steaks cooked medium-done take less cooking time, suffer less shrinkage, and are juicier than those cooked well-done. Beef roasts cooked

at a lower temperature, 250°F., take from 1/3 to $\frac{1}{2}$ again as long as those cooked at 350°F.

Use a thermometer to be sure of degree of doneness of frozen roasts. If a roast is thawed, insert a thermometer so the bulb is in the center of the thickest part of the roast. If a roast is hard frozen, insert the thermometer when the center of the roast is thawed, or meat is about half-done.

How to Cook Tender Cuts of Meat

Roasting

Place meat on a rack in a shallow, uncovered pan. Do not add water. Insert a meat thermometer as directed above. Add drip accumulated during defrosting. See table 3 for oven temperatures, desirable internal meat temperatures, and cooking times for fresh, defrosted, and hard-frozen meat.

Table 3. Approximate Times for Roasting Meats at Constant Oven Temperatures

Kind of meat	Cut	Weight	Oven temp.	Internal temp.	Approximate cooking time	
					Fresh or completely defrosted	Hard- frozen
<i>Beef</i>						
Standing rib roast		4	300-325			
Rare				140	1 $\frac{1}{2}$ -1 $\frac{1}{4}$	2-2 $\frac{1}{2}$
Medium				160	1 $\frac{1}{2}$ -2	2 $\frac{1}{2}$ -3
Well-done				170	2-2 $\frac{1}{2}$	3-4
Rolled rib roast		4				
Rare				140	2-2 $\frac{1}{2}$	2 $\frac{1}{2}$ -3
Medium				160	2 $\frac{1}{2}$ -2 $\frac{1}{4}$	3-3 $\frac{1}{2}$
Well-done				170	2 $\frac{1}{2}$ -2 $\frac{1}{4}$	3 $\frac{1}{2}$ -4
<i>Pork, well-done*</i>						
			325-350			
Loin, center cut		5		185-190	4 $\frac{1}{2}$ -5	†
Shoulder, bone in		5		185-190	3 $\frac{1}{2}$ -4	
Shoulder, boned, rolled		4		185-190	3 2/3-4	

*Cook pork thoroughly to avoid any possibility of trichinosis infection.

†Cooking pork from the hard-frozen state is not recommended.

Broiling

Broiling is excellent for tender cuts of beef and lamb with large exposed surfaces, such as steaks and chops. Pork and veal are not well marbled with fat and dry out if broiled. Cut steaks for broiling 1 to 3 inches thick, and lamb chops $\frac{1}{4}$ -inch thick (table 4).

Preheat broiler oven and broiler pan at 350°F. for 10 minutes. Rub fat over broiler rack. Slash fat edge of the meat in several places to prevent curling during cooking. If you like the center of meat rare or medium, place steak or chops 2 inches from source of heat; if you like it well-done, place them 3 to 4 inches from heat source. Place thick steaks farther from heat because they need slower cooking. Leave broiler oven door open or ajar during broiling, not only to watch browning, but to see if the fat is catching fire.

After meat is brown on one side, salt and turn it. The meat is already warm so browning the second side takes less time than the first. When

the meat is brown on the other side, test it for desired doneness by cutting a small gash in the meat next to bone and noting color.* Or if the steak is thick enough, you may insert a meat thermometer horizontally into the center of the largest muscle. It is impossible to give exact broiling times (table 4) as they depend upon your cooking equipment; thickness, composition, weight, and initial temperature of steak; and details of your cooking procedure.

"Sizzling" platters may be used instead of the broiler pan. They are made of metal with indentations in them to carry off juice from the meat as it cooks into a "well" in the platter. The steak is served on this platter.

Combination broiling and roasting

Sear meat on both sides in a preheated broiler at 500°F. to 550°F. Season it and place in a slow oven, 250°F. to 300°F.; roast until done.

*This test does not work well if you have fluorescent lighting.

Table 4. Approximate Times for Broiling Steaks in Preheated Broiler
Cooking Time per Side

Thickness <i>inches</i>	Internal temperature <i>degrees F.</i>	Fresh or completely defrosted <i>minutes</i>	Hard- frozen <i>minutes</i>
1	140	10 to 12	20 to 25
	160	12 to 15	25 to 35
	170	14 to 20	35 to 40
1½	140	12 to 15	25 to 30
	160	14 to 20	30 to 40
	170	16 to 25	40 to 45
2	140	20 to 25	40 to 50
	160	25 to 35	45 to 60
	170	35 to 45	60 to 80

This is good for cooking thick steaks or chops to a uniform, well-done stage.

Pan-broiling

Any tender piece of meat or ground beef patties can be satisfactorily pan-broiled. Preheat a heavy frying pan with or without grease. Place thawed meat in sizzling hot pan; add no water. Brown meat on both sides with high heat; reduce heat, and continue cooking until done. For hard-frozen meat, keep heat low to prevent surface from becoming too brown while center is still chilled. Test for doneness as with oven-broiled steak. Pour off fat as it accumulates during cooking. Salt meat, dot with butter, and serve on a hot platter.

Pan-frying

Pound steak thin and dip it in seasoned flour. Fat is needed to prevent scorching, and is not poured off as it accumulates. Serve steak as soon as it is done.

How to Cook Less Tender Cuts of Meat

Braising

In braising, the meat is seasoned with or without being dipped in flour, browned in fat, and then cooked slowly with water or other liquid. Hard-frozen meat cooked with water requires 25 to 50 per cent more cooking time than fresh meat does. Plan on 3 or more hours.

Braising may be done by simmering on top of the range, in a 300°F. oven,

or in a pressure saucepan. You may wish to slip a low rack in the pan under the browned meat to prevent sticking during the long cooking period. Add only enough water to keep the meat from burning. The amount required will depend on the degree of heat applied, the tightness of the cover, and the length of cooking. It is possible to braise meat in its own juices if you use sufficiently low temperatures, a tightly-fitting cover, and a heavy-bottomed pan.

Stewing

For a brown stew, roll small pieces of meat in seasoned flour and brown in hot fat. Barely cover the meat with water and let *simmer* in a heavy, tightly covered pan until tender. If necessary, add more water during cooking. Add vegetables just long enough before serving (usually $\frac{1}{2}$ hour) so they will not be overcooked. Thicken the liquid for gravy. Beef and lamb stews usually take $1\frac{1}{2}$ to $2\frac{1}{2}$ hours.

Meat Gravies

Use meat drippings in gravy; they contain meat flavor, soluble protein, and B vitamins.

Roast meat gravy

Pour clear fat drippings from roasting pan into a bowl. Return 2 tablespoons of fat to pan for each cup of gravy you wish to make. Stir in 2 tablespoons of flour for each 2 tablespoons of fat drippings. Slowly add milk or water, using 1 cup for each 2 tablespoons of drippings; stir con-

tinuously until gravy boils and thickens. Scrape bottom and sides of pan to loosen the savory bits. Season. Gravy should be smooth and free from lumps. Do not strain it because this usually removes flavorful bits. By adding more or less liquid, adjust thickness of gravy to your preference. Serve very hot.

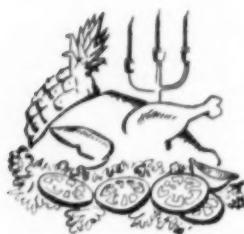
If you have roasted your meat at low temperatures to a "rare" stage, there may not be many drippings, so add fat. If gravy is not brown enough, use a commercial browner or a bouillon cube.

Steak gravy

Unthickened pan gravy is usually served with broiled, pan-broiled, or fried steak. Thickened gravy for steak is made as for a roast.

Pot roast gravy

Remove meat and any vegetables to a platter and keep them hot. Skim off any excess fat. Measure the broth and add enough water to it to make 2 cups for each 3 pounds of roast. Return broth to saucepan. For 2 cups of broth, make a paste of 4 tablespoons of flour with cold water. Add paste slowly to hot broth, stirring continuously. Boil for 5 minutes. Season to taste.



Most people prefer to thaw poultry, although it may be cooked from the hard-frozen state. If cut-up poultry is to be stewed, you can put it in the water hard-frozen. Broilers, fryers, and turkey steaks may require thawing before the pieces can be separated. It is difficult to get a brown crust on undefrosted fryers. If you dip poultry in eggs and crumbs, thaw it first; the crumbs will cling better.

Like beef, poultry thawed before cooking by dry heat cooks more uniformly and with less fuel than does that cooked from the hard-frozen

POULTRY

state. Thaw large poultry roasts before cooking so thickest muscles are thoroughly cooked. If poultry is roasted unthawed, the outside may be overdone and dry by the time the inside meat is done. It is easier to stuff and truss thawed birds, and the stuffing is more certain to be thoroughly heated when the bird is done.

Thaw poultry in its original package. The skin of an *uncovered* bird becomes dry and tough when exposed to the air during thawing. Refrigerator thawing is preferred for whole birds. The outside of a large bird thawed before an electric fan may lose quality before the center is thawed. A whole bird may be thawed in cold running water. The bird should stand in water only until it becomes pliable.

Table 5. Timetable for Thawing Poultry

Method	Temperature	Weight of ready-to-cook poultry	Approximate thawing time
degrees F.			time
Refrigerator	40-50	4-10 pound turkey 10-20 pound turkey 20-24 pound turkey 5 pound roaster, chicken 3 pound cut-up fryer	1 to 2 days 2 to 3 days 3 to 4 days 15 to 30 hours 10 to 20 hours
Room temperature	70-75	5 pound roaster 3 pound cut-up fryer	5 to 6 hours 4 to 5 hours
In running water		4-10 pound turkey 10-20 pound turkey 20-24 pound turkey 5 pound roaster, chicken 8 pound roaster, chicken	4 to 6 hours 6 to 8 hours 8 to 12 hours 1 to 3 hours 3 to 6 hours

Once poultry is thawed, cook it promptly while it is still cool. Little difference has been noted in flavor, juiciness, or drip loss owing to thawing method, including oven-thawing. Birds thawed before cooking may be more tender than those cooked hard-frozen.

COOKING

Chicken and turkey

Roasting procedures

Cook poultry, like meat, at a moderate temperature. If poultry must be thawed during cooking, do not try to speed cooking by using high temperatures. It is better to allow extra time at a low temperature for the meat to thaw and cook all the way through. All directions for cooking are for the *ready-to-cook* bird which is the form in which birds are frozen.

After thawing, transfer giblets and neck to a pan and cover with water.

Add salt, cover pan, and simmer until giblets are tender. The heart and gizzard of older chickens require about 1 hour, those of turkeys $1\frac{1}{2}$ to 2 hours. When giblets are tender, grind or chop them with neck meat. If you use them in the gravy, add them to the broth in which they were cooked. You may use the chopped giblets in the stuffing. Add the broth to the stuffing or to the gravy.

Prepare stuffing just before bird is to be cooked. *We do not recommend stuffing birds before they are frozen because of the risk of food poisoning.* Stuffing inside a bird takes a long time to reach the freezing point and is also the last part to thaw. During these periods, bacterial growth may occur. The meat of the bird may be well-done before the stuffing is hot enough to kill spoilage bacteria. Stuffing frozen in a bird will be soggy too. Plan to make 1 to $1\frac{1}{4}$ cups of dressing per pound of bird, ready-to-eat weight.

Stuffing is usually made of dried bread cubes or crumbs, with whatever seasoning you prefer.

Rub the neck and body cavity of the bird with 2 to 3 teaspoons of salt. Do not pack the stuffing tight because it swells during cooking. If the members of your family like different kinds of stuffing, you may wish to put one kind in the body cavity and another kind in the neck cavity.

If some stuffing is left over, press it lightly into a pan or casserole. Cover or not as you wish. Bake this stuffing during the last 1 to 1½ hours of bird roasting time. Stuffings are made either dry and crumbly, with little if any liquid added, or moist and heavy with more liquid added. The amount of fat added depends on the fattiness of the bird and your personal preference. It is often advisable to use a basic recipe and then adjust the ingredients to suit your taste.

Basic Bread Stuffing

Yield: about 4 cups

4 cups dry bread cubes or crumbs
½ to ¾ cup melted fat
1 teaspoon salt
½ teaspoon pepper
stock or water to moisten

You may add one or more seasonings such as 3 tablespoons chopped onion, or 1 cup chopped celery, or sage to taste, or ½ cup seedless raisins, or 1 cup chopped oysters, or 1 cup chopped celery and 2 cups chopped boiled chestnuts, or ½ pound sautéed sliced mushrooms, or 1 cup chopped,

stuffed olives, or substitute corn bread for the bread cubes, or 1 cup whole kernel canned corn or 1 cup cut-up drained cooked dried apricots or pitted prunes for 1 cup of bread cubes.

After stuffing, truss the bird to give it a compact shape. This improves appearance, helps it to cook uniformly, and makes it easier to carve. In *trussing*, fold neck skin onto the back. Twist wing tips and fold them onto the back so that the wings lie flat and give some steadiness to the bird during carving. The wing tips should hold the neck skin in place. If necessary, close body cavity either by sewing or with skewers and lacing. Turn bird on its back. Using a piece of string about 3 feet long for chicken, and longer for turkey, loop center of the string around tail and tie it securely. Push drumsticks forward as far as possible and cross strings over the ends of the legs. Pull legs down close to the bird. Pass each string along the side of the bird to its respective wing. Pass cords over wing joints, turn bird over, and tie string tightly over folded skin across back.

To roast, brush skin of bird with melted fat or cover with cheesecloth dipped in melted fat. Or lay a piece of metal foil loosely over bird. Remove during latter part of cooking to brown bird. Or lay bird in center of large square of foil. Bring edges of foil together with drugstore fold. Roast at 450°-500° F. Open foil during last part of cooking to brown bird. Cooking time is much shorter with this method. Basting is not necessary.

Insert a meat thermometer into thigh next to the body. The thigh requires the longest cooking. You may also insert another thermometer in the center of the dressing.

Place bird on a rack in a shallow pan. Do not add water. Start roasting with breast down. For the last hour of roasting, turn the breast up to brown. Place bird in a 300° to 325°F. oven and roast at a constant temperature until done. During cooking, if certain parts of the bird brown too quickly, rearrange cloth to increase the layers over these areas. If cloth dries out, add melted fat. The meat thermometer in the thigh should register 190°F. when bird is done and the one in the dressing at least 165°F.

About 15 to 30 minutes before the time you have estimated that the bird should be done (table 6), test doneness by moving drumstick up and down. The leg joint should not be stiff, and flesh should be slightly shrunken from skin. After you remove bird from the oven, let it stand in a warm place for about 15 minutes. This permits juices to be absorbed into the meat, and less juice will be lost in carving. This period also gives you time to make the gravy.

To make gravy for roast chicken, pour off surplus fat, leaving 4 to 5 tablespoons in the pan. Add 4 tablespoons of flour and blend until smooth. Add 2 cups of milk slowly to the mixture, stirring constantly.

Table 6. Approximate Roasting Times for Defrosted Poultry

Bird	Ready-to-cook weight <i>pounds</i>	Oven temperature <i>degrees F.</i>	Approximate cooking time
			<i>hours</i>
<i>Whole Birds, Stuffed</i>			
Chicken	3½ to 4	325	2½
	4 to 5	325	2½ to 3
	5 and more	325	3½ and up
Capon	7	325	4
Turkey	4 to 8	325	2½ to 3
	8 to 12	325	3½ to 4
	12 to 16	275	5 to 6
	16 to 20	275	5½ to 7
	20 to 24	275	7 to 8½
Duck	4 to 6	300-325	2 to 2½
Goose	10 to 12	325-350	3 to 4
Pheasant	2 to 3½	300-325	1 to 1½
<i>Half and Quarter</i>			
Turkeys	3½ to 5	325	3 to 3½
	5 to 8	325	3½ to 4
	8 to 12	325	4 to 4½

Cook over a low fire, stirring until it boils. Season with salt and pepper. Remove all strings and skewers from bird before serving.

Half or quarter turkeys may be roasted. Rub the cavity and cut surfaces with salt. Skewer skin to the meat along the cut edges to protect flesh during roasting. Depending upon the part of the bird to be roasted, tie leg to the tail piece or wing to the breast. Place turkey skin-side up on a rack in a shallow pan. Roast according to directions given for whole birds.

Broiled

To make chicken compact enough to cook and serve, break joints. Bend them—do not cut. Pull leg and wing close to body and skewer in place. Season and brush with melted butter. Place bird on rack or remove rack from broiler pan and place bird on the pan, cut side up. For small birds, 1½ to 2 pounds, place broiler pan 5 inches from source of heat. For heavier birds, 2 to 3½ pounds, either lower the pan to 7 inches from heat or reduce heat. Turn bird every 10 minutes and brush with melted fat. Broil until both sides are well-browned and the flesh is tender, 40 to 50 minutes. Pour pan drippings over chicken, and serve.

Pan-fried

Dip pieces of chicken in seasoned flour or cornmeal or a mixture of the two, or dip in egg and then in crumbs. Place fat about one-inch deep in a heavy frying pan. Fat should be hot but not smoking. Put the thickest, less tender pieces of chicken (thigh

and leg) in pan first. Do not crowd pieces; the fat should come up around each piece. Cook at low heat, turning pieces several times, until they are brown. If bird is young and tender, this amount of cooking will be sufficient. If bird is older, add 1 to 3 tablespoons of water, cover pan closely, and cook at a low temperature until flesh is tender, 15 to 20 minutes. If cover fits tightly enough, and heat is sufficiently low, no added water is necessary. Serve with chicken gravy (pages 11-12).

Braised

Small, young, frozen fryer-roaster turkeys, weighing 3 to 8 pounds, may be frozen cut-up and then braised. Braising turkey is much like frying older chicken. Browning takes about 20 minutes and moist heat cooking 30 to 50 minutes. If you wish skin crisp, remove cover the last 10 minutes. Serve with a cream gravy like that for roast chicken.

Stewed

Stewing is a good way to cook an older, less tender chicken. Heat 1 quart of water in a deep kettle and add 1 tablespoon of salt. Add pieces of chicken and giblets. Cover tightly and *simmer* until thigh meat is tender, 2 to 2½ hours. Stewed chicken may also be cooked in a pressure saucepan. Follow directions that come with pan.

Duck and goose

The flesh of duck and goose is dark, similar to that of dark meat of chicken.

Roast

Season birds inside and out with salt and pepper. Stuff with desired dressing or roast without stuffing. Un-stuffed birds cook more quickly. If duck is not stuffed, you may place quartered apples or small onions in the body cavity. Mashed potatoes and boiled rice are often used for stuffing ducks. If you stuff goose, do not add fat because the goose's fat is sufficient. Add raisins, apples, prunes, or some other tart fruit to the basic bread stuffing for goose. Try adding 2 cups chopped apples and 2 cups chopped cooked prunes to 6 cups of bread cubes. For extra tartness, add 2 tablespoons of lemon juice.

Truss birds and roast as you would chicken (pages 9-12). If duck is not fat, baste it with melted fat. You will pour off several cups of melted fat from a goose, even though the body cavity fat has not been frozen with the bird. You may roast a very fat goose at 500°F. for $\frac{1}{2}$ hour before cooking at 325°F. Prick the skin of a goose with a sharp fork to let the melted fat drain out and the skin become crisp. Pour off fat occasionally while cooking. Make gravy as for chicken (pages 11-12).

Serve duck with orange sauce: blend 2 tablespoons flour with 2 tablespoons duck fat. Add 1 $\frac{1}{2}$ cup water and $\frac{1}{2}$ cup fresh or frozen orange juice and $\frac{1}{2}$ teaspoon salt. Cook, while stirring, until sauce is thick.



GAME

THAW game before cooking. Cook game, such as venison, as you do beef, and small game, such as pheasant, wild duck, and wild goose, as you do poultry. With the exception of wild duck and wild goose, the flesh of most wild game is relatively tender and contains less fat than does the domestic variety, but has a more pronounced flavor.

Venison

Since venison is a dry meat, it is improved by the addition of fat.

Pot roast

Lard the meat with fat, salt pork, or rub well with bacon fat. Rub with seasoned flour, place in a covered pan, and roast in a 300°F. oven. To brown meat, uncover pan during last few minutes of cooking. For rare meat, roast about 25 minutes per pound; for

medium-done meat, about 30 minutes per pound.

Make a brown gravy as for roast beef (pages 7-8). You may brown the flour and use sour cream as the liquid.

Broiled

Use chops, 1 to $1\frac{1}{2}$ inches thick, from a young animal. Rub both sides well with fat. Preheat broiler and rack and broil chops as for beef steak (page 6). Rare steaks take about 15 minutes, well-done steaks, 30 to 40 minutes.

Rabbit

Rabbits need no soaking or parboiling, but you may soak them if you like a mild flavor. Rabbits absorb water during soaking.

Braised

Dredge pieces with flour or coat with flour, egg, and bread crumbs. Brown slowly in a small amount of fat in a heavy frying pan or Dutch oven, turning to brown all sides. Season. Add a small amount of liquid (1 to 4 tablespoons), cover pan tightly, and simmer until meat is tender, 1 to $1\frac{1}{2}$ hours. Turn meat occasionally. To brown and crisp the surface, remove cover before meat is done. Serve with gravy made from pan drippings.

Fried

Cover pieces of rabbit with water and juice of $\frac{1}{2}$ lemon and boil 10 min-

utes. Drain and season with salt, pepper, and a few grains of nutmeg. Dip in beaten egg, then in bread crumbs, and fry in deep fat, 385° to 400°F .

Pheasant

The meat of pheasant is drier than that of most birds. Moist heat is preferred for cooking pheasant.

Braised

Season cut-up pieces of pheasant and dip in flour. Brown all sides in a small amount of fat in a heavy pan. Add 1 cup of water, cover the pan, and *simmer* until tender, about $1\frac{1}{2}$ hours in a 300°F . oven, or on a range. The browned pheasant may also be cooked in a pressure saucepan.

Roast

Use a young hen weighing about 3 pounds. Prepare, stuff, and roast it as you would chicken (pages 9-11).

Wild Duck and Wild Goose

Flesh of wild duck is darker and drier than that of domestic duck.

Roast

Salt birds inside and out and fill with peeled, quartered apples, whole oranges, or bread stuffing (page 10). Truss and roast as you would chicken (pages 10-11). If desired, baste bird at intervals with 1 cup of orange juice.

FISH and SHELLFISH



FISH is easier to handle if it is partially thawed before cooking. Hard-frozen fish cooked by dry heat usually spatters and sticks to the pan more than thawed fish does; however, some people prefer to cook fish from the hard-frozen state to avoid losing quality.

Cook partially thawed fish at a lower-than-usual temperature and for a longer time. Cook it before it is completely thawed, while there is still some ice in it. If you are using fish in chowder, soup, or stew, it is not necessary to thaw it.

Certain shellfish, such as crab, lobster, and sometimes shrimp, are often completely cooked before they are frozen to avoid toughening during frozen storage. When you use them in dishes, such as lobster Newburg, thaw only enough to break them apart. They will be quickly heated during cooking with the other ingredients. Thaw scallops, oysters and clams before using them in cooked dishes. In using shellfish in cocktails or salad, thaw them completely.

The best method of thawing fish is in the refrigerator in the original carton. Do not thaw it completely.

Cooking

Cook partially-thawed fish as you would fresh fish: bake, broil, pan-fry, deep-fat-fry, steam, or boil it. Fish contains less fat than meat so add some to non-oily fish. It is often mild in flavor so serve a flavorful sauce with it. Fish is lacking in color so serve colorful vegetables with it. It is tender, so *do not overcook it*. Cook only enough to heat it through. The time required depends largely on the thickness of the piece.

Fat fish (herring, mackerel, salmon, shad, smelt, trout, whitefish, etc.) are best for baking and broiling, and lean fish (cod, flounder, sole, haddock, halibut, rockfish, shellfish, etc.) are best

Table 7. Approximate Times for Partially Thawing One-Pound Package Frozen Fish

Method	Approximate time
Refrigerator	hours 3 to 4
Room temperature	1
In front of an electric fan	$\frac{1}{2}$

for boiling and steaming. The latter group has firmer flesh. However, both fat and lean fish may be fried.

Baked

Place partially-defrosted fish in a greased baking dish. Brush the surface of non-fatty varieties with melted fat, margarine, or salad oil, and sprinkle with salt, pepper, and paprika. Bake at 350° to 400°F. until the fish is heated through, about 10 minutes per pound up to 4 pounds, and 6 minutes for each additional pound.

Broiled

Brush fillets with melted butter, margarine, or salad oil, and sprinkle with salt, pepper, and paprika. Place it skin side down (if fish has skin) on a well-greased broiler rack which has been preheated at 350°F. for 10 minutes. Place the pan about 2 inches from heat. When the flesh side is brown, loosen the fish carefully from the rack with a spatula, turn, and broil on skin side. Fish will broil in 15 to 30 minutes. Loosen the entire under-surface of the fillets from the broiler rack or pan before you try to transfer the fillet to a platter.

Pan-fried

Roll fillets in seasoned flour, cornmeal, or fine crumbs. Place the fish in about $\frac{1}{2}$ inch hot fat in a heavy fry-

ing pan with the skin side down. Allow the fat to come up between the pieces. Cook over medium heat until the underside is brown, then turn and brown the flesh side of the fish.

Deep-fat-fried

Dry the fish, dip it in beaten egg, and then roll it in a mixture of $\frac{1}{2}$ cup flour, $\frac{1}{2}$ cup cornmeal, and 1 1/3 tablespoons of salt. Put fish one layer deep in a frying basket. Fry the fish in deep fat, 385° to 400°F. until it is a uniform golden-brown color, 5 to 8 minutes. Do not deep-fat-fry fish that is more than 1½ inches thick, because it may not be cooked thoroughly. You may also fry fish without bread-ing it.

Steamed

Steaming and boiling are recommended for thick pieces of dry-meated fish. Sprinkle fish with salt, and steam it. If the fish is very thick, turn it once.

Boiled

Salt fish, tie it loosely in cheesecloth, and lower into boiling water. If desired, salt and vinegar, or lemon juice, may be added. Acid helps to firm the flesh and keep it from breaking. After 5 minutes of boiling, lower the tem-perature and simmer until done, allowing 10 to 15 minutes per pound.



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